



Shoptalk

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A PUBLICATION FOR HAZARDOUS WASTE GENERATORS

Companies Rise to the “Challenge”

Ecology honored 19 companies and facilities in May for their high achievements meeting the Cleaner Production Challenge to conserve water and reduce toxic sludge and wastewater. The Challenge focused on electroplaters, printed circuit board manufacturers and aerospace parts manufacturers.

The 43 companies participating in the four-year project saved 235 million gallons of water, reduced sludge by over 1 million pounds, and saved \$1.8 million. Overall, the participants reduced sludge by 40 percent and wastewater by 67 percent.

“It’s never easy to improve the way you do business, but these companies did,” said Polly Zehm, Deputy Director of Ecology. “What’s more, they did it during difficult economic times. That’s impressive.”

Equally impressive is that the Cleaner Production Challenge project won the Most Valuable Pollution Prevention Project Award from the non-profit National Pollution Prevention Roundtable. Rob Reuter, of Ecology’s Northwest Regional Office, will travel to Washington, D.C. to receive the “MVP2” award. Reuter was instrumental in conceiving the project, including its name.

The project gave participants access to state-of-the-art manufacturing methods, teaming a number of Washington businesses to share their best methods. Several companies already in the vanguard mentored other companies in a mix of venues that ranged from work-

shops and classes, to tours of facilities, to site visits and technical assistance at less efficient plants. (Technical resources on the techniques used are available at www.pprc.org/cpc/)

High achievers included:

- *Ace Galvanizing* of South Park, reduced sludge by 35, 48 and 65 percent in successive years.
- *Avtech* of Seattle, reduced sludge by 74 percent one year and by another 50 percent the following year and wastewater by 40 percent.
- *Industrial Plating Corp.* of Seattle, reduced sludge by 30 percent in a single year.
- *Metal Finishing Inc.* of Marysville, consistently reduced sludge by more than 70 percent throughout the duration of the challenge.
- *Novation Inc.* of Spokane, reduced its sludge generation by 15 percent during the challenge, eliminating 16,000 pounds of waste annually.

■ *Skills Inc.*, AAP Division, of Seattle, reduced sludge by up to 28 percent and wastewater by over 80 percent in a single year, saving more than 1.5 million gallons of water annually.

■ *TC Systems Inc.* of Everett, reduced sludge by 74 percent, or more than 67,000 pounds, in a single year.

■ *Naval Undersea Warfare Center* in Keyport, reduced more waste each successive year of the challenge. By 2003, it had generated 1 million fewer gallons of waste than in 2000.

■ *The Boeing Company*, Frederickson, reduced sludge by 48 percent by 2003.

For more information on the Cleaner Production Challenge, contact Dennis Johnson, (425) 649-7040, e-mail: djoh461@ecy.wa.gov.



Cleaner Production Challenge sponsors (from left) Carolyn Gangmark (EPA), Darin Rice (Ecology), Chris Wiley (Pollution Prevention Resource Center), Mike Merryfield (Washington State Association of Metal Finishers and American Electroplaters and Surface Finishers Society), Ed Cierebiej, Peter Weickman, and Alan Thompson (The Boeing Company).

Law Bans Mercury-Containing Products

As of January 1, 2006, it will be illegal to sell or distribute certain products that contain mercury in Washington state. This includes thermometers, manometers (pressure-measuring instruments, such as blood-pressure gauges) and novelty items such as toys, games, or jewelry that contain mercury. Mercury-free alternatives to these products are already on store shelves, but products that contain mercury are still being sold.

Retailers and wholesalers need to remove such products from their shelves by the end of 2005. Sales of thermostats containing mercury are also banned, unless the manufacturer participates in a thermostat-recycling program.

Mercury is a liquid, silver-colored metal with unique properties to conduct electricity and measure temperature and pressure. It is widely used in household and commercial products, but it is also highly toxic. Mercury can damage the brain, heart, lungs, and central nervous system. Developing fetuses are especially vulnerable.

People are exposed to mercury primarily by eating contaminated fish. Mercury spilled outdoors often ends up in lakes, streams and the ocean, where bacteria convert it into methylmercury. It accumulates as it moves up the food chain. Another common source of mercury exposure is fluorescent bulbs. Since January 1, 2004 these bulbs have been required to carry labels indicating the presence of mercury. It is illegal to sell unlabeled bulbs.

To learn more about the Mercury Education and Reduction Act, contact Miles Kuntz at (360) 407-6748 or e-mail miku461@ecy.wa.gov. To find out how Washington is addressing mercury issues and how to clean up a mercury spill safely, visit Ecology's Web site at www.mercurymess.org.

Thank You Dangerous Waste Reporters!!

The Dangerous Waste Annual Report Team wants to thank waste reporters for successfully using the new TurboWaste.Net application. An amazing **87 percent** of reporters filed their annual reports this year using the online system! "The transition from paper reporting to using TurboWaste.Net has saved taxpayer money in paper and mailing costs," said team member Iris Aguilera. "We really appreciate all that reporters have done this year to improve government efficiencies."

The Tricks of Manifesting

Manifests can be a problem area for waste generators. This is especially true if you don't use them often. Manifests are part of the "paper trail" needed to ensure that hazardous wastes are being transported and disposed properly.

Hazardous waste compliance inspectors offer these tips to avoid common problems:

- Make sure your name and the generator name on the manifest match. Sign your own manifest as the generator. The transporter or consultant does not generate your waste.
- Make sure you have originals, not carbon or photocopies, in your files. You should get the original signed version of the manifest back from your waste management facility.
- Keep all manifests. If you do not get your original signed version back within 35 days of shipment, you must begin the process of locating the manifest and your waste.

Check the next issue of Shoptalk for an article on manifest changes that must be in place by September 2006.

Financial Assurance Requirements

Used oil processors and other dangerous waste recyclers must now have financial assurance for both accidental liability and closure coverage. Treatment, storage, and disposal facilities operate under these same requirements. Dangerous waste generators should make sure their recycling vendors meet these requirements.

Dangerous waste recyclers were required to have accidental liability coverage in place by July 1. These facilities need to submit their closure plan and closure/post-closure cost estimate to Ecology by October 1, 2005.

Ecology has developed free tools to help develop closure plans and cost estimates. The *Closure Plan Template for Dangerous Waste Recyclers and Used Oil Processors* explains how to prepare a closure plan and what information needs to be included. The template can be downloaded from www.ecy.wa.gov/biblio/0504006.html. The *Closure Cost Estimating Tool ("CCET")* is an Excel spreadsheet that will help you calculate closure and post-closure costs for your facility, based on the information you provide in your closure plan. You can download the CCET and its companion user guide from www.ecy.wa.gov/biblio/0504009.html. Ecology can also provide these documents on CD or by e-mail.

If you have questions or need additional help to prepare your closure plan, please contact your nearest regional office (see back page for phone numbers). If you have questions or need additional help to prepare your cost estimate, or if you have questions about which facilities are required to have financial assurance instruments, please call Kimberly Goetz, Ecology's Financial Assurance Officer, at (360) 407-6754, or e-mail kgoe461@ecy.wa.gov.

Standout Facilities Reduce the Use of Toxics, Water and Energy

The University of Washington

Motor Pool won the 2004

Governor's Award for Pollution Prevention and Sustainable Practices through innovation...and a lot of hard work.

The facility developed a nearly paperless reservations system, switched to soap and hot water for parts cleaning, and runs most of the 700-vehicle fleet on re-refined motor oil. Recycling spent antifreeze has reduced new antifreeze purchases by 300-600 gallons per year. The parts washer change means 400 less gallons of solvent purchased each year, which also means no disposal costs and no employee exposure to solvent fumes.

The motor pool supports 175 alternative fuel vehicles and

Fairchild Air Force Base, near Spokane, won the 2004 award for reducing its use of hazardous materials by more than 93 percent and its energy consumption by over 33 percent.

The base recently replaced the original 1940 light fixtures in four hangars with innovative "light pipe" technology that provides better, glare-free light using less energy. They also installed radiant heat systems in the hangers and drive-thru areas. This achieved a 42-percent energy savings for these areas, while a base-wide energy conservation program reduced natural gas consumption and saved \$1 million.

An aggressive leak-repair program reduced water use by more than 35 million gallons in one year.

The base's worksite commute-trip-reduction program eliminates over two million miles of single-occupancy driving and 114,400 pounds of air emissions annually.

switched to more fuel efficient buses for the Health Science Express. The new buses produce 60 to 80 percent less exhaust emissions, 20 percent

less nitrogen dioxide (a greenhouse gas) and 30 percent fewer particulates.



Holly Campbell, Ralph Castellino (from left), and David Carr and Diana Perey (from right), accept their award from Tom Fitzsimmons, the governor's Chief of Staff (center).



Diane Wulf, Colonel Douglas Jackson (from left), and Lieutenant Colonel Sal Nodjomian and Bill Turner (from right), accept their award from Tom Fitzsimmons, the governor's Chief of Staff (center).

Free "Toolbox" CD

The Hazardous Waste Generator's Toolbox (publication #05-04-010) is a compendium of useful, informative guidance publications covering the proper management and reporting of a wide variety of dangerous wastes, and other topics of interest to generators.

Rock to the groove of hits like *Designating Dangerous Waste*, sway to the soulful *Universal Waste Rule for Batteries*, boogaloo with *Mercury Awareness*, and many, many more!

To get your free copy, send your name and mailing address to dzin461@ecy.wa.gov or call Dave Zink at (360) 407-6752.

Q **What are the requirements for dating and accumulating “Universal Waste?”**

A In 1995, EPA adopted the universal waste rule allowing certain common, lower risk hazardous wastes to be managed under less stringent regulation. In Washington state, universal waste includes batteries, thermostats, lamps, and mercury-containing equipment.

Universal wastes must be sent to a universal waste destination facility within **one year** after they are removed from service or received from another handler of universal waste. Acceptable destination facilities meet either the requirements for treatment, storage and disposal, or for recycling facilities. The generator must track accumulation time so as not to exceed the one year period. (Time extensions can be granted to allow economically-feasible amounts to be accumulated for transport.)

The tracking can be done by any method that clearly demonstrates the length of time that the universal waste has been accumulated, such as dating the collection container or

maintaining an inventory system recording the date the item becomes a waste.

The item or collection container must be labeled as universal waste by category, for example, “universal waste batteries.” The waste must be stored to minimize releases of mercury or other toxic chemicals to the environment. Lamps must be stored in closed containers that prevent breakage.

Did you know?

According to a recent report*, Washington drivers generated an estimated 4,934,495 used tires in 2003. That's almost 84,000 tons of used rubber and steel! *Solid Waste in Washington State: 13th Annual Report, Publication 04-07-018

Read the “tree-free” Shoptalk!

You can read *Shoptalk* online at <http://www.ecy.wa.gov/programs/hwtr/shoptalkonline/index.html> And while you're there, subscribe to the electronic version to receive notice when each new electronic issue becomes available.

Department of Ecology

Remember, your business is liable for all hazardous wastes generated. If you are uncertain about your responsibilities as a hazardous waste generator, call your nearest Ecology office and ask for a hazardous waste specialist. For information on reducing or recycling hazardous waste, ask for the toxics reduction staff, also at the following numbers:

Bellevue: (425) 649-7000

Lacey: (360) 407-6300

Yakima: (509) 575-2490

Spokane: (509) 329-3400

If you need this information in an alternate format, please call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. If you are a person with a speech or hearing impairment, call 711, or 800-833-6388 for TTY.

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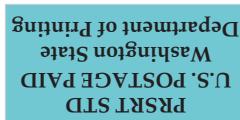
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